

about an object, where the data is stored in a set of fields. In the illustrated embodiment, the set of fields contained by each object entry includes an object geometry field 474 and a set of object properties fields. The set of object properties fields includes a thickness property field 476, color property field 478, layer property field 480 and an ID property field 481. The object entries 470 and 472 as well as the values contained therein were generated using the CAD application.

---

Substitute the following paragraph for the paragraph beginning on page 19, line 6:

---

Inserting the geometries of objects into the hierarchical tree structure creates a mapping between the properties associated with the objects in the CAD application and the properties associated with objects in the visual rendering application. The geometries of objects are stored as leaves within the tree structure. FIG. 4B illustrates an example of a hierarchy tree structure that is built based on attributes of objects that are specified in a CAD source file. To insert the geometries of objects into the hierarchy tree structure 400, the CAD source file 402 is first read to identify which objects are to be inserted into the hierarchy tree structure 400. In one embodiment, the object entries include a translation toggle 482 (FIG. 4A) that is used to indicate whether a particular object is to be inserted into the hierarchy tree structure 400. If the toggle value in an object entry is set to a particular value (e.g. "insert") then the object's geometry is inserted into the hierarchy tree structure 400. On the other hand, if the toggle value is set to a different value (e.g. "detached") then the object's geometry is not inserted into the hierarchy tree structure 400. In certain embodiments, a particular property or property value can be potentially used to determine the translation toggle value. For example, all objects that have a layer property value of "G2" can be excluded from being entered into the hierarchy tree structure 400.

---

Substitute the following paragraph for the paragraph beginning on page 20, line 1:

3  
X The hierarchy tree structure 400 includes a set of tree objects that are used to manage the links of the tree. In this example, the tree objects include a linked drawing list object 404, one or more linked drawing objects 406 and 408, a table object 410, a model space object 412, a set of collection objects 413 (layer collection objects 414 and 415, thickness collection objects 416 and 417, ID collection objects 418 and 419), leaf objects 420 and 421, modifier stacks 422 and 423 and nodes 424 and 425.

Substitute the following paragraph for the paragraph beginning on page 35, line 1:

4  
X At block 713, a compare key is generated for linking the object's geometry into the hierarchy tree structure. In one embodiment, the compare key is generated based on the selected set of filter objects. For example, referring to FIG. 4B, a compare key for entry 470 may be generated by model space collection 412 based on selected filter set 436 that includes at least the following information:

LAYER = "G1"

THICKNESS = "10"

ID = "7594"

In the Drawings:

Nine sheets of formal drawings (FIGS. 2-6D), corrected as required by the Notice of Draftsperson's Patent Drawing Review that accompanied the aforementioned Office Action, are submitted herewith. No new matter is introduced through the correction of the drawings.

Furthermore, FIGS. 7B and 7C are amended to correct typographical errors. No new matter is introduced in the corrected drawings. Hence, entry of the amended FIGS. 7B and 7C is respectfully requested.